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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/280,618	03/29/1999	MAHDI S. CHAMBERS	CHAMBERS-1	6099
7590 06/15/2005			EXAMINER	
JOHN E. CURTIN HARNES, DICKEY & PIERCE, P.L.C. P.O. BOX 8910 RESTON, VA 20195			FERRIS, DERRICK W	
			ART UNIT	PAPER NUMBER
			2663	

DATE MAILED: 06/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/280,618

Applicant(s)

CHAMBERS, MAHDI S.

Examiner

Derrick W. Ferris

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 March 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn. In particular, the previous obviousness rejection(s) are withdrawn based on applicant's phone interview conducted 6/8/2005 with John E. Curtin who clarified one example of a second switch as applicant's ATM switch 114 shown in applicant's figure 1. As such, examiner would agree that the above limitations in that context did not read on the applied reference. Hence the rejection was withdrawn. However, upon an updated search the examiner notes new prior art that reads on the claims as necessitated by applicant's amendment filed 9/15/2004 thus making the current rejection final.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claims 1-8, 11-13, 15-29 and 32-41** are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,442,169 B1 to *Lewis*.

As to **claim 1**, see e.g., the embodiment shown in figure 9a of *Lewis*. As such, applicant's DCR 110 is taught as the gateway 508 and NAS bay 902. In particular, applicant's BICR 112 is taught e.g., as CS 510 and applicant's ATM switch 114 (i.e., a second switch as claimed) is taught e.g., as NAS Bay 902. A first switch as claimed e.g.,

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is taught as AT 106 in figure 9A. Hence note that trunk 406 supports both voice and data, see e.g., column 19, lines 44-46. Voice information is sent from the second switch (i.e., NAS bay 902) to voice switch 506 over voice trunks 930, 932 and data (i.e., IP traffic) is sent from the second switch to the ISP 926 over data links 903. The determination of which bay the traffic is sent is made by CS 510(i.e., applicant's BICR), see e.g., column 29, lines 44-51 where the signaling is performed using an open architecture protocol (i.e., applicant's control link between applicant's BICR 112 and ATM switch 114). Thus the control server 510 controls the NAS (i.e., the second switch) and also supports both the first and second types of traffic. Signaling data sent from a first switch, e.g., AT switch 106 is relayed to the control server 510 via the SS7 gateway 512 (i.e., see the dotted lines in figure 9a). Hence all the claim limitations are met.

As to **claim 2**, numerous ISUP messages are sent over the SS7 network, see e.g., column 28, lines 2.

As to **claim 3**, the control server 510 in step 1030 looks up the called party number in an internal database such that the control server 510 performs the steps of decoding the signal data, determining a called directory number and matching the called directory number with an entry of a predetermined table correlation directory numbers, traffic types, and destination locations, see e.g., column 29, lines 25-50.

As to **claim 4**, as the called party number is compared to a database one skilled in the art can infer that at some point in time the database was created in order to make the comparison.

As to **claims 5-8**, see e.g., figure 9c where the internetworking trunks use the ss7 protocol and the data is converted to a second protocol based on whether the traffic type is voice or data. Thus a second protocol is either the open architecture protocol as taught by the reference of the actual voice or data links as shown e.g., in figure 9c. As such, for the first protocol, see e.g., columns 28 and 27 with respect to SS7 and also column 29, lines 9-23 with respect to SS7 A links. With respect to the second protocol see e.g., column 21, lines 21-42 and column 28.

As to **claim 11**, voice switch 506 is a class 5 switch, see e.g., column 30, lines 51-60.

As to **claim 12**, see e.g., routers 904 and 906 which act as remote access servers for the ISP.

As to **claim 13**, see e.g., table 6 for specific types of control signaling. In addition, note that other standards may also apply, see e.g., column column 21, lines 27-51.

As to **claim 15**, see e.g., column 24, lines 5-34 with respect to ATM.

As to **claim 16**, with respect to e.g., Ethernet, DS-1 and DS-3 see e.g., figure 9a with respect to the connections.

As to **claims 17-18**, the control server also supports accounting information, see e.g., column 22, lines 25-43. Information may further be stored in database 516, see e.g., figure 9a.

As to **claim 19**, see e.g., similar reasoning for claim 1.

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As to **claim 20**, see e.g., similar reasoning for claims 1 and 7.

As to **claim 21**, the control server is a BICR.

As to **claim 22**, see e.g., similar reasoning for claim 15.

As to **claim 23**, see e.g., similar reasoning for claims 1 and 7.

As to **claim 24**, see e.g., similar reasoning for claim 1.

As to **claim 25**, see e.g., similar reasoning for claim 1.

As to **claim 26**, see e.g., similar reasoning for claim 1.

As to **claim 27**, see e.g., the elements of the open architecture protocol.

As to **claim 28**, see e.g., similar reasoning for claim 3.

As to **claim 29**, see e.g., similar reasoning for claim 6.

As to **claim 32**, see e.g., similar reasoning for claim 11.

As to **claim 33**, see e.g., similar reasoning for claim 12.

As to **claim 34**, see e.g., similar reasoning for claim 13.

As to **claim 35**, see e.g., similar reasoning for claim 15.

As to **claim 36**, see e.g., similar reasoning for claim 16.

As to **claim 37**, see e.g., similar reasoning for claim 17.

As to **claim 38**, see e.g., similar reasoning for claim 18.

As to **claims 39-41**, see e.g., similar reasoning for claim 1.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 14** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,442,169 B1 to *Lewis* in view of U.S. Patent No. 6,292,463 B1 to *Burns et al.* ("*Burns*").

As such to **claim 14**, *Lewis* supports ATM but may be silent or deficient to using a switched connection and an SPVC, see e.g., column 24, lines 5-34.

*Burns* teaches the further recited limitation above at e.g., column 1, line 15-31.

The proposed modification of the above-applied reference(s) necessary to arrive at the claimed subject matter would be to modify *Lewis* by clarifying that SVCs and SPVC implementations in ATM are very well known in the art and since *Lewis* teaches ATM it would have been obvious to use a PVC, SVC, or SPVC.

As such, examiner notes that it would have been obvious to one skilled in the art prior to applicant's invention to include the above limitation. In particular, the motivation for modifying the reference or to combine the reference teachings would be for a switched connection. In particular, *Burns* cures the above-cited deficiency by providing a motivation found at e.g., column 24, lines 5-34. Second, there would be a reasonable expectation of success since both references teach ATM. Thus the references either in singular or in combination teach the above claim limitation(s).

6. **Claims 9, 30 and 31** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,442,169 B1 to *Lewis* in view of ATM Foundation for Broadband Networks to *Black*.

As such to **claims 9, 30 and 31**, *Lewis* supports ATM but may be silent or deficient to using Q.931 signaling in the network. In particular, *Lewis* teaches that the

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second protocol could be part of DS trunking which supports basic ISDN interface or Q.931 signaling. However, assuming the above limitation at issue is not clear, examiner also notes the following obviousness rejection as well.

*Black* teaches the further recited limitation above at e.g., pages 76, 84, and 86.

The proposed modification of the above-applied reference(s) necessary to arrive at the claimed subject matter would be to modify *Lewis* by clarifying that Q.931 signaling is well known in the art, especially for both ATM and integration with SS7 networks.

As such, examiner notes that it would have been obvious to one skilled in the art prior to applicant's invention to include the above limitation. In particular, the motivation for modifying the reference or to combine the reference teachings would be to use a common communications standard where Q.931 is a common communications standard. In particular, *Black* cures the above-cited deficiency by providing a motivation found at pages 84 and 86. Second, there would be a reasonable expectation of success since both references teach ATM. In addition, *Black* teaches that ISUP, as taught by *Lewis*, works in conjunction with ISDN Q.931. Thus the references either in singular or in combination teach the above claim limitation(s).

### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Derrick W. Ferris whose telephone number is (571) 272-3123. The examiner can normally be reached on M-F 9 A.M. - 4:30 P.M. E.S.T.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571)272-3139. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Derrick W. Ferris  
Examiner  
Art Unit 2663

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